







Work Order ID 70013

Wednesday, May 25, 2011 12:02:42 PM




Page 1

Item ID: D3016-041 Accept  Setup Start 
Revision ID:
Item Name: Seat Frame Assembly Stop 
Start Date: 5/25/2011 Start Qty: 1.00  Cust Item ID:
Required Date: 6/10/2011 Req'd Qty: 1.00  Customer:
Reference:

Approvals: Process Plan: CL Date: 11/05/25 Tooling: _____ Date: _____ Run Start 
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop 

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3016	RevA / DEO A-1								

100 Weld per dwg A/R 4130 rod Batch: M100075 0.00
Large Fab

 Large Fab
Large Fab

Memo 0.00

1-Cut all tubes as per Dwg D3016

2-Deburr

3-Assemble tubes, fittings and weld as per Dwg D3016 using welding jig
DT8597

4-Transfer drill holes from D3017-041 and D3021-041 in seat frame D3016-041

5- Assemble brackets and gusset per dwg and weld

110 QC9- Inspect visual per QSI004- Fusion Welds 0.00



QC Memo 0.00

Quality Control

EL 11-6-8 (21)

1 2 BE 11/06/13

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Item ID: D3016-041

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Setup Start



Revision ID:

Stop



Item Name: Seat Frame Assembly

Start Date: 5/25/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 6/10/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

120 QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

5/26/13

Set

130 Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00



Powdercoat

Memo

0.00

Powder Coating

Install paint screws on fitting ends

START TIME: 8:30

OVEN TEMPERATURE: 9:00

FINISH TIME: 3:20

1X 11-6-13

140 QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

1 11-6-13

11/15/28

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Item ID: D3016-041

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Setup Start



Revision ID:

Stop



Item Name: Seat Frame Assembly

Start Date: 5/25/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 6/10/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

150

Identify as per dwg & Stock Location:

G-A

0.00



Packaging

Memo

w/o

70005

0.00

Packaging

EJS 11/06/13

160

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/06/14

MF

11-06-14

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

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1. The first step in the process is to identify the problem or issue that needs to be addressed. This involves gathering information and understanding the context of the problem.

2. Once the problem is identified, the next step is to define the objectives and goals of the project. This helps to clarify what needs to be achieved and provides a clear direction for the team.

3. The third step is to develop a plan or strategy to address the problem. This involves breaking down the problem into smaller, manageable tasks and determining the resources needed to complete each task.





4. The fourth step is to implement the plan. This involves putting the strategy into action and monitoring progress regularly to ensure that the project is on track.

5. The final step is to evaluate the results of the project. This involves comparing the actual outcomes against the objectives and goals to determine the effectiveness of the project.

Required Date: 6/10/2011

Required Qty: 1.00

Comments: IPP A□01.09.19□New issue□EC□IPP RevB: as per revB DD verified by:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M4130NT0.750W.049 		Purchased	No			100	f	48.0990	4.3	4.526316			
4130 RD Tube .750 x.049W													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				MAT033				48.099					
				110740				1.129					
				117691				46.97					
M4130NT0.500W.049 		Purchased	No			100	f	54.4900	4.3	4.526316			
4130 RD Tube .500 x.049W													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				MAT032				54.49					
				110740				54.49					
M4130NT1.000W.120 		Purchased	No			100	f	27.6400	1.5	1.578947			
4130 RD Tube 1.00 x .120wall													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				MAT033				27.64					
				117372				2.64					
				117656				25					
D3016-17 		Manufactured	No			100	Each	4.0000	2	2			
Gusset													
				<u>Location</u>				<u>Loc Qty</u>		<u>Loc Code</u>			
				WA019				4					
				68736				4					

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

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Work Order ID: 70013



Parent Item: D3016-041



Parent Item Name: Seat Frame Assembly

Start Date: 5/25/2011

Required Date: 6/10/2011

Start Qty: 1.00

Required Qty: 1.00

D3016-13 Manufactured No

100 Each

2.0000 2 2



Bracket



EL 11-6-10

Location

Loc Qty

Loc Code

WA019

2

44778

2

D3016-15 Manufactured No

100 Each

6.0000 2 2



Gusset



EL 11-6-10

Location

Loc Qty

Loc Code

WA019

6

68735

6

D3020-1 Manufactured No

100 Each

9.0000 4 4



Fitting



EL 11-6-8

Location

Loc Qty

Loc Code

WA

9

36713

9

4

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Shop Packet Print

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W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D3016	REV. A SHEET 1 OF 3
DATE 01.05.18		TITLE SEAT FRAME ASSEMBLY	SCALE NTS
A	01.05.18	NEW ISSUE	

QTY	PART NUMBER	DESCRIPTION	MATERIAL
X	D3016-041	SEAT FRAME ASSEMBLY	N/A
1	D3016-1	TUBE	AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
2	D3016-3	TUBE	AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
1	D3016-5	TUBE	AISI 4130N TUBE, Ø0.50 DIA x 0.049 WALL (M4130N-T0500W049)
2	D3016-7	TUBE	AISI 4130N TUBE, Ø0.50 DIA x 0.049 WALL (M4130N-T0500W049)
1	D3016-9	SADDLE	AISI 4130N TUBE, Ø1.00 DIA x 0.120 WALL (M4130N-T1000W120)
1	D3016-11	SADDLE	AISI 4130N TUBE, Ø1.00 DIA x 0.120 WALL (M4130N-T1000W120)
1	D3016-13	BRACKET	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
1	D3016-15	GUSSET	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
1	D3016-17	GUSSET	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
2	D3020-1	FITTING	N/A

NOTES

- 1) WELD PER DART QSI 004
- 2) ON SHEET METAL PARTS, BREAK ALL UNMARKED CORNERS 0.020-0.040
- 3) FINISH: POWDER COAT GREY SANDTEX (REF. 4.3.5.6) PER DART QSI 005 4.3
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

CL11105125

W/D: 70013

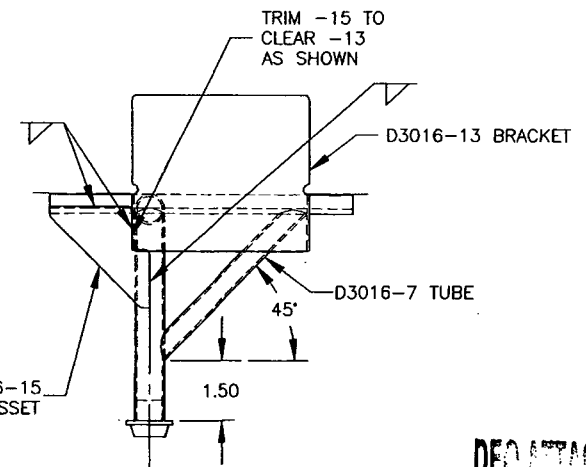
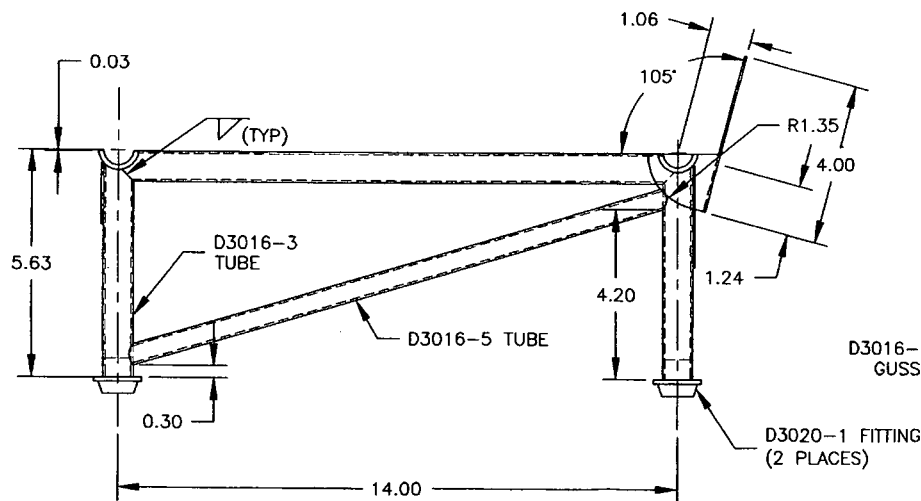
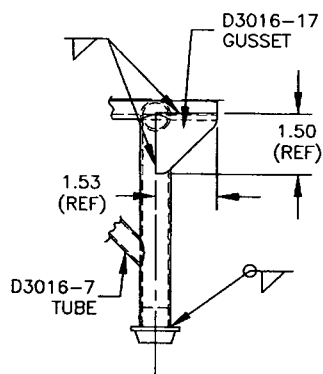
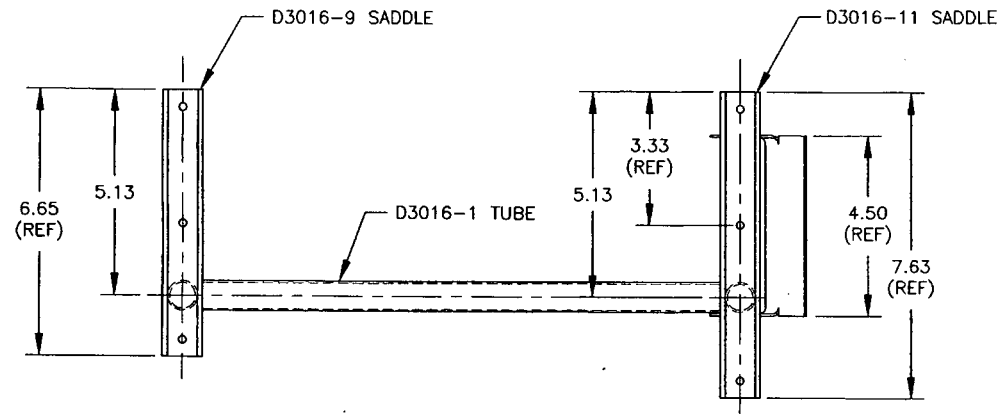
DEO ATTACHED

RELEASED
01.05.30 *#*

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D3016-041 SEAT FRAME ASSEMBLY



DETACHED
RELEASED
01.05.30

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DESIGN

DRAWN BY

DART

DART AEROSPACE LTD.
HAWKESBURY, ONTARIO, CANADA

CHECKED

APPROVED

DRAWING NO.

REV. A

DATE

D3016

SHEET 2 OF 3

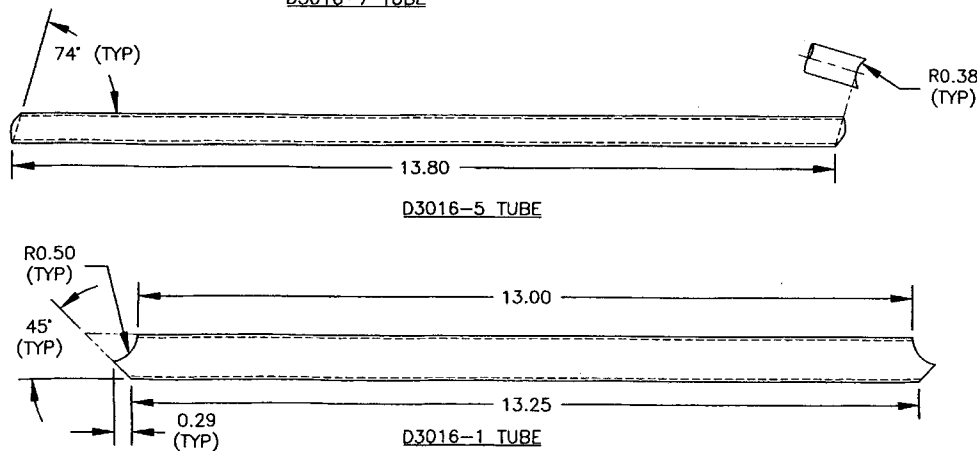
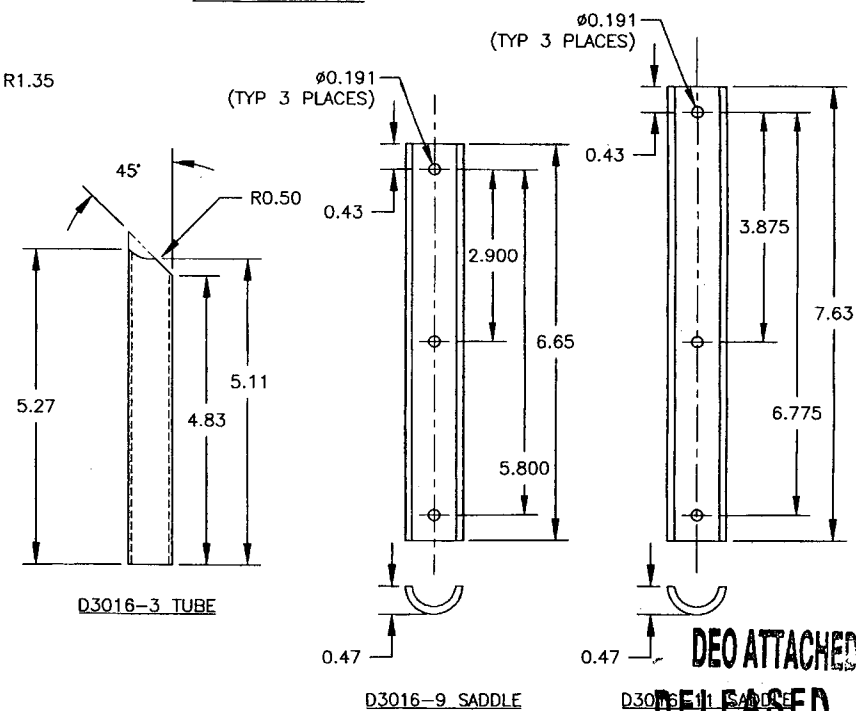
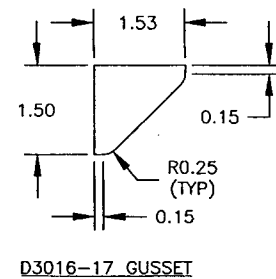
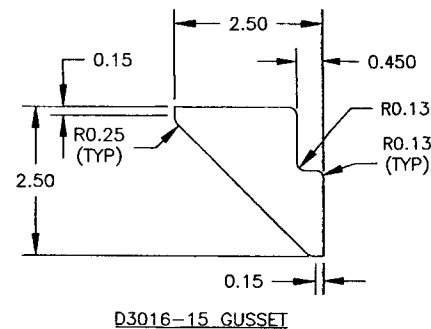
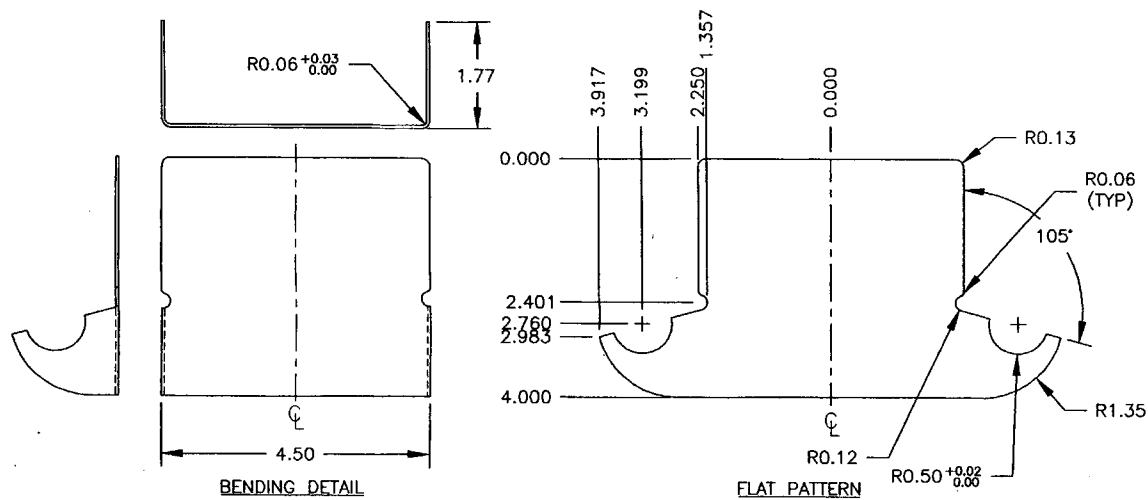
01.05.18

TITLE

SCALE

SEAT FRAME ASSEMBLY

1:3



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DESIGN CP	DRAWN BY CP	DART	DART AEROSPACE LTD. WARRICKSURY, ONTARIO, CANADA
CHECKED *	APPROVED *	DRAWING NO. D3016	REV. A SHEET 3 OF 3
DATE 01.05.18	TITLE SEAT FRAME ASSEMBLY	SCALE 1:2	

DEO ATTACHED
RELEASED
9.05.30

DRAWING NO. D3016	TITLE SEAT FRAME ASSEMBLY	REV. A	DART AEROSPACE LTD ENGINEERING ORDER	D.E.O. NO. D3016-A-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>1</i>	CHECKED <i>UP</i>	MFG. APPR. <i>RE</i>	APPROVED <i>MAP</i>	DE APPR. <i>TH</i>		
DATE 10.01.29	DATE 10.01.29	DATE 10.01.29	DATE 10.01.29	DATE 10.01.29		

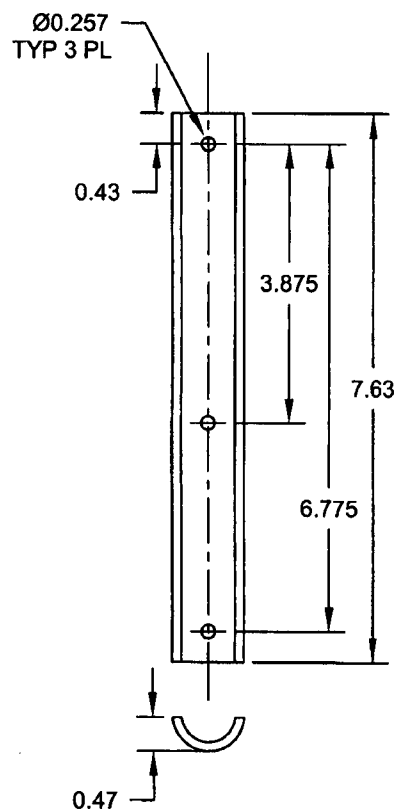
PURPOSE:

TO REVISE D3016-11 SADDLE'S HOLE SIZES

CHANGE:

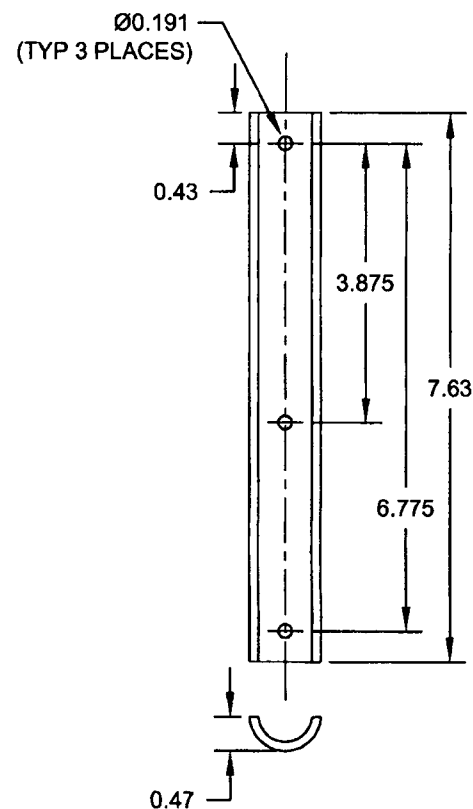
DETAIL D3016-11 SADDLE (SHEET 3): Ø0.257 TYP 3 PL WAS Ø0.191 (TYP 3 PLACES) AS SHOWN:

IS:



D3016-11 SADDLE

WAS:



D3016-11 SADDLE